WHAT IS CLAIMED IS:

1. A vibratory transducer for a fluid flowing in a pipe, said transducer comprising:

a flow tube vibrating in operation, for conducting the fluid, said flow tube communicating with the pipe via an inlet-side tube section and an outlet-side tube section, and said vibrating flow tube being, at least temporarily, laterally displaced from an assigned static rest position as a result of transverse impulses occurring in the transducer;

an excitation system for driving the flow tube;

a sensor system for sensing vibrations of the flow tube;

a first cantilever, fixed to an outlet end of the inlet-side tube section, for causing bending moments which elastically deform the inlet-side tube section; and

a second cantilever, fixed to an inlet end of the outlet-side tube section, for causing bending moments which elastically deform the outlet-side tube section,

said first cantilever having a centroid being located in the area of the inlet-side tube section and said second cantilever having a centroid being located in the area of the outlet-side tube section, and

said bending moments being such that in the deforming inlet-side tube section and in the deforming outlet-side tube section impulses are produced

which are directed opposite to the transverse impulses produced in the vibrating flow tube.

2. The vibratory transducer as claimed in claim 1, further comprising an antivibrator fixed to an inlet end and an outlet end of the flow tube.

3. The vibratory transducer as claimed in claim 1, further comprising a transducer case fixed to said inlet-sid tube section and said outlet-side tube section.

4. A method for operating a vibratory transducer being connected to a fluid-conducting pipe, said transducer comprising:

a flow tube for conducting the fluid flowing in said pipe, said flow tube communicating with the pipe via an inlet-side tube section and an outlet-side tube section, and said flow tube having an assigend static rest position in which said flow tube, said inlet-side tube section and said outlet-side tube are essentially aligned with each other and with an imaginary longitudinal axis of the transducer,

an excitation system for driving the flow tube;

a sensor system for sensing vibrations of the flow tube; and

a first cantilever fixed to an outlet end of said inlet-side tube section and a second cantilever fixed to an inlet end of said outlet-side tube section, said first cantilever having a centroid being located in the area of the inlet-side

tube section and said second cantilever having a centroid being located in the area of the outlet-side tube section,

said method comprising the steps of:

passing the fluid through said flow tube;

vibrating said flow tube; and

detecting vibrations of said flow tube,

said method comprising the further steps of:

causing displacement motions of said vibrating flow tube, said displacement motions displacing the flow tube laterally from said assigned static rest position such that said outlet end of the inlet-side tube section and said intlet end of the outlet-side tube section being spaced appart from said imaginary longitudinal axis;

causing each of said first and second cantilevers to oscillate about its respective centroid for forcing twisting motions of said outlet end of the inlet-side tube section and said intlet end of the outlet-side tube section, and

causing bending motions of at least parts of said inlet-side tube section and said outlet-side tube section, said bending motions are directed opposite to said displacement motions of said vibrating flow tube.

5. The method as claimed in claim 4 further comprises the step of:

causing the antivibrator to oscillate out of phase with the flow tube.

6. The method as claimed in claim 4 further comprises the step of:

causing the antivibrator to vibrate in an opposite phase to the flow tube.

7. The method as claimed in claim 4 further comprises the step of:

driving the flow tube to vibrate with a vibration frequency lying in a range of natural resonance frequency.

8. The method as claimed in claim 7 further comprises the step of:

driving the flow tube to vibrate with a frequency corrseponding with a natural resonance frequency of a symmetrical eigenmode of the flow tube.